In The Claims

Please amend the claims as follows:

1. (CURRENTLY AMENDED) A method of monitoring a bulk property of a product during its production comprising the steps of:

   ~~c)~~a) making repeated on-line measurements of samples of the product to obtain data related to a product property; and

   ~~d)~~b) using this data, determining a bulk property of the product so far produced.

2. (ORIGINAL) A method as claimed in claim 1 wherein repeated or continuous determination of the bulk property is made throughout the production of the batch.

3. (ORIGINAL) A method as claimed in claim 2, wherein the bulk property thereby determined is used to assist in controlling the production plant.

4. (CURRENTLY AMENDED) A method as claimed in claim 1~~, 2 or 3~~, wherein the measurements of step (a) are made sufficiently frequently to follow significant fluctuations in product quality.

5. (ORIGINAL) A method as claimed in claim 4, wherein the sampling frequency is at least twice the frequency of anticipated significant changes in the product property being tested.

6. (CURRENTLY AMENDED) A method as claimed in claim 4 ~~or 5~~, wherein a measurement is taken at least every 10 minutes.

7. (ORIGINAL) A method as claimed in claim 6 wherein a measurement is taken at least every 5 minutes.

8. (CURRENTLY AMENDED) A method as claimed in ~~any preceding~~ claim 1, wherein the calculation of a batch property takes into account the production rate at the times the relevant measurements occur.

9. (ORIGINAL) A method of controlling a polymer production process in which data directly related the aggregate properties of the batch of product produced so far are used to control the process in order to maintain the aggregate properties within specification.

10. (ORIGINAL) An apparatus for monitoring a bulk property of a product during its production comprising an input for receiving data corresponding to repeated on-line measurements of samples of the product which provide data related to a product property, the apparatus being arranged to use this data to determine a bulk property of the product so far produced.

11. (CURRENTLY AMENDED) An ~~A~~apparatus as claimed in claim 10 arranged additionally to receive data indicative of production rate and to use such data in determining the bulk property.

12. (CURRENTLY AMENDED) An a~~A~~pparatus as claimed in claim 10 ~~or 11~~, further comprising one or more measuring devices arranged to supply the input data.

13. (ORIGINAL) An apparatus as claimed in claim 12 wherein an NIR spectrometer is used to provide input data.

14. (CURRENTLY AMENDED) An apparatus as claimed in claim 12 ~~or 13~~, further comprising a weight loss feeder arranged to provide input data indicative of current production rate.

15. (CURRENTLY AMENDED) An apparatus as claimed in claim 10 ~~to 14~~, wherein determination of the bulk property is carried out by means of a computer under software control.

16. (CURRENTLY AMENDED) A polymer production plant comprising an apparatus for monitoring a bulk property of a product during its production comprising an input for receiving data corresponding to repeated on-line measurements of samples of the product which provide

data related to a product property, the apparatus being arranged to use this data to determine a bulk property of the product so far produced~~as claimed in any of claims 10 to 15~~.